

IN THE CLAIMS

Please cancel without prejudice claims 2, 9, 18 and 13 and amend claims 1, 8, 17 and 35 as follows.

The following claim set replaces all prior versions, and listings, of claims in the application:

1. *(Currently Amended)* A method of providing a silicon micro-needle, the micro-needle

having a base adjoining a silicon substrate, a tip remote from said base,

and a duct ~~in at least a region of said~~ passing from said base to said tip, the method comprising:

A, a. providing a duct in said silicon substrate; and

subsequently

b. selectively removing the substrate from around the duct

to provide a micro-needle coincident with the duct.

2. *(Cancelled)*

3. *(Previously Amended)* A method according to claim 1 wherein a mask is lithographically provided on a substrate of the first material prior to the formation of the duct.

4. *(Original)* A method according to claim 3 wherein the mask is used to provide the duct which is fabricated by any one of the following techniques: plasma enhanced etching, laser ablation, light assisted anodisation, ion beam milling, focused ion beam milling.

5. *(Previously Amended)* A method according to claim 1 wherein the micro-needle is bounded by planes of the first material which have a low etch rate.

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6. *(Original)* A method according to claim 5 wherein an anisotropic etch is used to selectively remove the first material.

7. *(Previously Amended)* A method according to claim 1 wherein the first material is removed by any one of the following methods: focused ion beam milling, etching combined with a domed resist mask.

8. *(Currently Amended)* A method of providing a silicon micro-needle, the micro-needle having a base adjoining a silicon substrate, a tip remote from said base, and a duct ~~in at least a region of~~ passing from said base to said tip, the method comprising:

a. selectively removing the silicon substrate to provide a micro-needle; and
subsequently

b. providing a duct coincident with the micro-needle.

9. *(Cancelled)*

10. *(Previously Amended)* A method according to claim 8 wherein the micro-needle is bounded by planes of the first material which have a low etch rate.

11. *(Original)* A method according to claim 10 wherein an anisotropic etch is used to selectively remove the first material.

12. *(Previously Amended)* A method according to claims 8 wherein said micro-needle is formed by any one of the following techniques: focused ion beam milling, etching combined with a domed resist mask.

13. *(Previously Amended)* A method according to claim 8 wherein once the micro-needle has been formed a planar surface is provide covering the micro-needle.

14. *(Original)* A method according to claim 13 wherein the duct is provided by lithographic processes performed on the planar surface.

15. (*Original*) A method according to claim 14 wherein once the duct has been provided the planar surface is removed.

16. (*Previously Amended*) A method according to claim 1 wherein the method is arranged to provide a micro-needle whose outer walls are inclined to a plane that is perpendicular to the substrate to which the micro-needles are adjacent.

Amended 17. (*Currently Amended*) A method of providing a micro-needle on the surface of a first material, the micro-needle having a base adjoining the first material, a tip remote from said base, and a duct ~~in at least a region of~~ passing from said base to said tip, the method comprising:

- a. providing a duct in said first material,
- b. lining said duct with a second material, and
- c. removing said first material from around said second material leaving a micro-needle fabricated from said second material attached to said first material and upstanding therefrom.

18. (*Cancelled*)

19. (*Previously Amended*) A method according to claim 17 wherein the second material is any one of the following materials: SiO₂, a metal, ceramic, a polymer, a semiconductor.

20. (*Previously Amended*) A method according to claim 17 wherein a portion of the second material covering the inside surface of the duct is removed before or whilst the first material is removed from around the second material.

21. (*Previously Amended*) A method according to claim 17 wherein the first material is removed by etching.

22. (*Previously Amended*) A method according to claim 17 wherein a mask is lithographically provided on a substrate of the first material prior to the formation of the duct.

23. (*Original*) A method according to claim 22 wherein the mask is subsequently used to control fabrication of the duct.

24. (*Previously Amended*) A method according to claim 17 wherein the duct is fabricated using any one of the following processes: plasma based etching, laser ablation, focused ion beam milling, light assisted anodisation of silicon.

25. (*Previously Amended*) A method according to claim 17 wherein the second material is provided by any one of the following processes: oxidation, deposition.

26. (*Previously Amended*) A method according to claim 17 wherein the micro-needle is shaped by removing a portion of the second material.

27. (*Previously Amended*) A method according to claim 1 in which once the micro-needle has been created the method further includes linking the duct to a reservoir.

28. (*Original*) A method according to claim 27 in which a portion of the first material is removed from a side opposite a side of the first material where the micro-needle has been fabricated.

29. (*Previously Amended*) A method according to claim 27 in which the first material is attached to a second piece of material.

30. (*Original*) A method according to claim 29 in which the second piece of material has a channel which connects to the duct and links the duct to a reservoir.

31. (*Previously Amended*) A method according to claim 29 in which the first material has a channel which connects to the duct and links the duct to a reservoir.

32. (*Previously Amended*) A method according to claim 29 in which the two pieces of material are fabricated from same material.

33. (*Previously Amended*) A method according to claim 1 in which the micro-projection is fabricated substantially normal to the surface of the first material.

34. (*Previously Amended*) A method according to claim 1 wherein a surface region of the micro-needle is porosified after the needle has been fabricated.

35. (*Currently Amended*) A method according to claim ~~25~~34 wherein the porosification is provided by one of the following techniques: electrochemical anodisation, or immersing the structure in a stain etching solution.

36. (*Cancelled*)